

Application No. 09/766,439 - Filed: January 19, 2001
Betros et al.
Response to Office Action and Request for Reconsideration

REMARKS

Claims 1-21 are pending in this application. Attached hereto is a complete listing of all claims in the application, with their current status listed parenthetically.

Rejection Under 35 U.S.C. § 112, 1st paragraph (no enablement)

In the 1st paragraph of the Office Action, the Examiner rejects claims 1-22 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The Examiner provides an analysis of the determining factors for undue experimentation. As discussed below, the Applicant respectfully traverses the rejection.

A. The claims are enabled by the Specification

Before entertaining a discussion as to the amount of experimentation required, the Examiner is reminded that “[a]s long as the specification discloses at least one method for making and using the claimed invention that bears reasonable correlation to the entire scope of the claim, the enablement requirement is met.” M.P.E.P § 2164.01(b)

Claim 1	Claim element	Exemplary Embodiment
Preamble	A method for enabling two-way asynchronous communication between a client and a web server to occur using a single HTTP transaction, the method comprising:	Summary of the Invention “The invention, relates to a system and method for maintaining direct, two-way asynchronous communication between a client and a web server”
1a	opening, by the client, one socket connection to the web server;	“The system 100 illustrates only one socket connection between a single client 102 and a single host 120.” (Page 4, line 3-4)

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1b	communicating an HTTP request from the client to the web server over the one socket connection as part of the single HTTP transaction, wherein the HTTP request is a request for the web server to initialize a CGI that operates within or in conjunction with the web server;	"According to one embodiment of the invention, a CGI is invoked in response to HTTP request passed from the client 102 to the web server 122 and on the CGI." (Page 5, lines 3-4)
1c	initializing, by the web server, the CGI after receiving the HTTP request from the client;	"The initial HTTP request identifies to the web server, which CGI to invoke." (Page 5, lines 4-5)
1d	executing, by the CGI after the CGI has been initialized, operations to enable the two-way asynchronous communication between the client and the web server to occur over the one socket connection and wholly within the single HTTP transaction until the CGI operations are terminated by the client or the CGI; and	<p>"The CGI, according to an exemplary embodiment of the invention, is configured to perform operations that include continuous, two-way asynchronous communication of data between the client 102 and the CGI." (Page 5, lines 5-8)</p> <p>"In an exemplary embodiment, the task of performing two-way asynchronous communication is accomplished within a single HTTP transaction" (Page 6, lines 9-10)</p> <p>"Thus, in accordance with the invention, the CGI will continue until notified by the client." (Page 6, lines 12-13)</p>
1e	closing, by the web server, the one socket connection after the CGI operations have been terminated;	"At step 250, upon termination of the CGI, the socket is closed" (Page 6, lines 13 -14)

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1f	wherein the two-way asynchronous communication between the client and the web server over the one socket connection and wholly within the single HTTP transaction allows for sending of particular information from the web server to the client and for sending of information from the client to the web server; said particular information and said information being communicated in a protocol other than HTTP; and wherein the web server is able to send the particular information to the client without receiving a request from the client for the particular information.	"In one particular embodiment, the information <u>sent or received</u> by the CGI is compliant with a protocol other than HTTP." (Page 5, lines 28-29) "When the information is available, as shown with step 242, the information is sent to the client at step 232. The second operation continually repeats until the CGI is terminated..." (Page 5, line 34 – Page 6, line 1)
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It is respectfully submitted that the above exemplary embodiments, disclosed in the specification, clearly bear reasonable correlation to the entire scope of the claim. It is additionally submitted that the other independent claims 9, 20, and 21 include similar elements, limitations, and are of similar scope. Since the dependent claims further refine and limit the scope of the independent claims, it is respectfully submitted they are additionally enabled by the specification. The Applicant therefore respectfully requests the Examiner reconsider and withdraw the rejection on this basis alone.

B. The specification enables one of ordinary skill to make and use the invention without undue experimentation.

In the Office Action the Examiner provides an analysis of the "undue experimentation factors" and asserts the amount of experimentation required would be "undue". As discussed below, the Applicant respectfully traverses this rejection.

(a) Breadth of the Claims: The Examiner concludes the claims are "Broad" based on a review of claim scope. The Examiner states:

“Essentially all particular implementations for performing two-way asynchronous communications between a client and a server fall within the scope of the claims”

While the Applicant has claimed the scope commensurate with that of the specification, the Examiner has failed to consider the entirety of the claims. For example, claim 1 includes the limitation that the two-way asynchronous communications take place within a “single HTTP transaction”. The Examiner is reminded that “the examiner should determine what each claim recites and what the subject matter is when the claim is considered as a whole, not when its parts are analyzed individually.” M.P.E.P. § 2164.08.

Further, it is important to note that “[a]s concerns the breadth of a claim relevant to enablement, the only relevant concern should be whether the scope of enablement provided to one skilled in the art by the disclosure is commensurate with the scope of protection sought by the claims. See *AK Steel Corp. v. Sollac*, 344 F.3d 1234, 1244, USPQ2d 1280, 1287 (Fed. Cir. 2003), See also M.P.E.P. § 2164.08. As clearly illustrated above the scope of the claims is appropriate. This factor suggests the level of experimentation is not undue.

(b) Nature of the Invention:

The Applicant notes that the Examiner did not apply this factor. The Applicant submits the nature of the invention is in computer network communications. Early protocols for computer network communications were known in the late 1960's. Methods of configuring computers go as far back as computers themselves. Applicant suggests that the invention, and the claims, are drawn to novel, non-obvious techniques within a very well known area. This factor suggests the level of experimentation is not undue.

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(c) State of the Prior Art:

The Applicant submits that the Examiner's analysis under state of the prior art is misdirected. The Examiner states:

"[T]he very features that the applicants argue distinguish the claims from the prior art are those not described. A search of the prior art has not disclosed a system as claimed for performing two-way asynchronous communication between a client and a server within a single HTTP transaction."

The Examiners statement that the prior art has not shown the claimed elements, while accurate is misguided under this factor. The Applicant is somewhat perplexed. If the Examiner had found prior art disclosed a system as claimed for performing two-way asynchronous communication between a client and a server within a single HTTP transaction, the Applicant would have expected a rejection on the basis of that art. This in no implies that the state of the prior art is deficient. It only implies that the present invention is truly novel and non-obvious in an arena where the knowledge and skill of those in the art is significant. This factor suggests the level of experimentation is not undue.

(d) Level of Ordinary Skill: The Applicant notes that the Examiner did not apply this factor. The Applicant additionally asserts the level of ordinary skill in the art at the time of the invention was high. The filing date of the application was January 19, 2001. The state of the art, and the level of one of ordinary skill was significant. By January 2001, the Internet had made a significant impact on society, the number of persons skilled in the art was substantial, and the level of programming skills of those involved in "the new economy" was significant. This factor suggests the level of experimentation is not undue.

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(e) The level of Predictability in the Art:

Applicant notes with appreciation the Examiner's correct assessment that the computer arts are generally considered predictable. The Applicant agrees with the Examiner that this factor suggests the level of experimentation is not undue.

(f) The Amount of Direction Provided: The Examiner asserts that the level of direction provided weighs in favor of "undue experimentation". The Applicant reminds the Examiner that "[t]he amount of guidance or direction needed to enable the invention is inversely proportional to the amount of knowledge in the state of the art as well as the predictability in the art." See *In re Fisher*, 42 F.2d 833, 839 166 USPQ 18, 24 (CCPA 1970). See also M.P.E.P § 2164.03. "The more that is known in the prior art about the nature of the invention, how to make, and how to use the invention, and the more predictable the art is, the less information needs to be explicitly stated in the specification." *Id.* As discussed above, specific protocols for computer communications have been known for over 40 years. Computer programming has been around as long as computers themselves. The art is extremely predictable the Examiner points directly to some enabling provisions of the specification, and others are presented above. This factor clearly suggests the level of experimentation is not undue.

(g) The existence of working examples. The Examiner is correct in his assertion that the specification does not point out the existence of working examples. The Examiner is reminded that "the absence of working examples will not by itself render the invention non-enabled." See M.P.E.P § 2164.02. This in no implies they do not exist. Prior to the filing date, the Inventor conceived and reduced the invention to practice. Subsequent to filing the application, the Applicant released the "Discover-cast platform" utilizing various embodiments of the present invention. The Applicant has a number of commercial licensees of the present invention. Working Examples existed at the time of filing of the application. This factor clearly suggests the level of experimentation is not undue.


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(h) The Quantity of Experimentation Needed: Computer programming is a known art. The Applicant asserts that given the disclosure one of ordinary skill would not need to "experiment" at all. A person of ordinary skill would understand how to implement the present invention just by reading the specification. This factor clearly suggests the level of experimentation is not undue.

In light of the above discussion, it is respectfully submitted that the rejection is traversed. The claims in the application are clearly enabled by the specification. It is requested that the Examiner reconsider and withdraw the rejection.

Conclusion

Applicant believes that this Response has addressed all items in the Office Action and now places the application in condition for allowance. Accordingly, favorable reconsideration and allowance of all claims at an early date is solicited. Should any issues remain unresolved, the Examiner is invited to telephone the undersigned.

Respectfully submitted,
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